AN EXPLORATORY ANALYSIS OF ONLINE SHOPPING BEHAVIOR IN TURKEY

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Abstract:
Alongside the technologic developments, transformation in user behavior and business models has been observed. New areas and models are emerged in a lot of grounds like the communication of people or daily activities. So a new face put for shopping behavior by the e-commerce, which is one of the novelties. This study tries to research online shopping behavior in Turkey. With a quantitative research, device usage, the reasons behind to shop or not to shop online, online shopping category and e-commerce site preferences, payment methods, international e-commerce and online marketplace usage is investigated. As implications of the research, “saving time” is found to be the foremost reason for shopping online in Turkey and “travel and bookings” category is found as the most shopped category among the results of the survey.

Keywords: E-commerce, E-commerce In Turkey, Online Shopping, Online Consumer Behavior

1. Introduction:
As computers spread all over the world, people started to get benefits of this technology in more areas than business and office purposes. Computers were only used by universities and large-scale companies since they were not easily affordable and appropriate for small spaces (Grosse, n.d.). After the technologic developments and cheaper prices on personal computers, most of the homes started to get access to computers.

Today, Internet is used many areas like music, television, communication, social media, health, security, education and more. Especially mobile device owners need Internet like they need electricity. This need may be a little further for some of the people like they can’t move on in the life without their mobile device or Internet. Anxiety of being unable to use mobile device or Internet to get contact is called Nomophobia and it is a reproduce wording of “No Mobile Phone Phobia” (King et al., 2014, p. 28). It is not surprising that people developed new kind of fears like Nomophobia which are related to addiction to their mobile phones and internet.

In the world of today, since the people are addicted to their digital devices and Internet, they developed a new user behavior as well. New user behavior affected most of the markets and sectors. As people tend to do their transactions online; shopping, which is one of the biggest economic values, is carried to digital devices. So e-commerce (electronic commerce) was born.

This paper first examines e-commerce in definition and history. Afterwards, Turkey is detailed in terms of economic impact of e-commerce and online shopping behavior, lastly findings are discussed and concluded.

2. Literature Review
2.1 E-commerce Definition
Before defining e-commerce, it would be helpful to understand what commerce is. According to Oxford Dictionaries (n.d.) commerce is defined as follows, “The activity of buying and selling, especially on a large scale.” So commerce is a simple transaction where a seller and a buyer take place.

Zwass (1996) defines e-commerce as “the sharing of business information, maintaining business relationships, and conducting business transactions by means of telecommunications networks” (p. 3). Based on this definition, any commercial transaction made on a telecommunication network other than internet would be a subject of e-commerce. Despite the fact that e-commerce may not be on internet only, the term is redefined by the dominance of internet and digital era that we are in. Chesher, Kaura & Linton (2003) stated, “In particular, the news media seized upon the term e-commerce and largely redefined it as the marketing and selling of products/services to consumers over the internet” (p. 40). So e-commerce is an internet term and it can be summarized as, e-commerce is buying and selling products or services on internet.

2.2. Evolution of E-commerce

Technologic developments led e-commerce into an infinite evolution. In this journey, e-commerce was born from more basic technologies, recently it is transformed by new devices and internet, and in the future it is expected that e-commerce may reach to a technologic level beyond the imaginations.

2.2.1. History

E-commerce origins root back to late 1970s when there was no easily affordable computers or Internet connection at home. Information Technology Engineer Michael Aldrich and his colleague Peter Champion led the birth of online shopping in 1979 by their invention allowing to connect a computer to a television (Coleman & Ganong, 2014, p. 974). According to Taylor (2013), M. Aldrich is the inventor of online shopping which is called as “teleshopping” at that time (p. 20).

After Aldrich’s invention, in 1980’s a new technology, which is regarded as one of the most successful online services before internet, was born. A private network named Minitel was launched by France Telecom in 1982, allowing users to look up phone numbers, arrange travel bookings, make financial transactions and shop online (Cornelius et al., 2002, p. 204).

With these ancestral models of e-commerce, it has transformed to a new level in 1990’s with a revolutionary technologic development.

2.2.2. Today

Until World Wide Web is introduced by Tim Berners-Lee in 1989 and his first web site is launched in 1991, technology was not very fast and practical and e-commerce couldn’t be useful (Jones, 2014). E-commerce was skyrocketed with the invention of World Wide Web and web sites due to their useful structure. There is no doubt e-commerce got a rapid grow by the customers started to search world wide web for products and services (World Trade Organization, 2013, p. 3).

In mid 1990’s, e-commerce pioneers like Amazon and eBay are founded. They had important roles at the evolution of e-commerce.

With all of the connected devices such as smartphones, tablets and laptops; e-commerce is so powerful today. Easy accessibility, better prices and convenience caused a migration of shoppers from physical channels to digital channels.

2.2.3. Future of E-commerce

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Although e-commerce is on the rise and very powerful in recent years, one of the major weaknesses of online shopping is unavailability to examine products physically. In the near future, technologic developments may create new capabilities for consumers to go beyond this weakness. Consumers can examine a product on a computer or experience a simulation with Virtual Reality (VR) applications, which contain web based and interactive three-dimensional models (Figueroa & Häubl, 2002, p. 744).

Other aspect of VR is the one which is experienced through special headsets. VR headsets are expected to transform the way of e-commerce. According to Kent (2015), physical stores have connection to internet and consumers got used to shop via their mobile devices, so mix of a physical and digital worlds may lead a new shopping experience: Virtual reality shopping (p. 20).

In 2020, digital technology will be unfolded by the companies including fetching and analyzing of consumer data, high end social media usage and engaging consumers with employees whether in-field, in-store or on a travel (Dugal et al., n.d., p. 15)

3. E-Commerce in Turkey

According to The Republic of Turkey Prime Ministry Investment Support and Promotion Agency of Turkey (n.d.), half of the population is observed as under the age of 30.7 among 77.7 million people. Although the population of Turkey is getting older, when it is compared to the European countries, the youngest population has been recorded in Turkey with the ratio of 16.6 percent, even as Italy and Spain have the lowest young population ratio by 9.9 percent (Anadolu Agency, 2014). Gordon and Hodgson (2012) stated, “The e-commerce sector is booming in Turkey, as a result of a large youth population familiar with new technology and solid economic growth, with real internet retailing value expanding by 61.1% over 2006-2011.” In Turkey, e-commerce market size has been growing so fast and it is seen like Turkish e-commerce market will have a more important position not only in the country but globally (Piramit E-commerce, n.d.).

3.1. Evolution of E-commerce in Turkey

As Cedetas (n.d.) reported, the first e-commerce application in Turkey was the electronic store of Remzi Bookstore launched in 1997, which was prepared in the second half of 1996 by Prizmanet. In the food sector, Migros Türk founded Sanal Market in 1997, which is the largest supermarket chain in Turkey (Dean et al., 2013, p. 26). In 1998, one of the first Turkish e-commerce sites bepsiburada.com was founded (Eticaret Gundem, n.d.). With just a team of 3 personnel, 6 categories and 2,700 advertisements on site, sabibinden.com was launched in 2000 and there has been a great interest on it (Patronturk, 2012). Gittigidiyor.com was founded as a company with 3 partners and launched on 5th of February, 2001 (Gittigidiyor, n.d.). In the beginning, online shopping has been observed in low rates due to low speed dial-up internet connection, but after the launch of Asymmetric digital subscriber line (ADSL) connection by Turkish Telecom in 2002 growth rate has been higher (İyiler, 2009, p.57). The most outstanding foreign capital inflows have been the acquisition of Biletix by Ticketmaster in 2006, the partnership of Ebay and Gittigidiyor in 2007 and the foreign capital partnership of Yemeksepeti.com in 2008 (Afra, 2010). In the leadership of Grupanya, in 2009 a new e-commerce business area has been opened which allows users to purchase the products or services of 3rd party companies with discount (Türkiye Cumhuriyeti Kalkınma Bakanlığı [Ministry of Development of Turkish Republic], 2013, p. 127). Turkish e-commerce market has been a focus of attention and fast growth. Afra (2013) stated, “There are four main driving forces behind this growth: Credit Card Penetration, Logistic infrastructure, high mobile internet usage and a viral / social young population.”.

3.2. E-commerce Statistics From Turkey

According to Turkish Statistical Institute (2015), computer and internet usage ratios have been 54.8 and 55.9 percent in order among the people who are aged between 16 and 74 in April 2015. Household with internet access proportion has been 69.5 percent. 96.8 percent of households have either mobile phone or smartphone. Among the

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internet users, proportion of individuals who made a purchase of a good or service online has been 33.1 percent (Turkish Statistical Institute, 2015).

In its' report “Türkiye'de E-ticaret 2014 Pazar Büyüklüğü” [2014 Market Size of E-Commerce in Turkey], Turkish Informatics Industry Association (2015) illustrates the market size of e-commerce in Turkey as 18.9 billion TL with 945 sites. 384 only online sites generate 6.3 billion TL, 326 travel and vacation sites generate 6.8 billion TL, 272 multi channel retail sites generate 3.5 billion and 6 online legal betting sites generate 2.1 billion TL (p. 8).

Büyükyıldırım (2015) claims, just in 3 years period internet users will be over 53 million, e-commerce customers will be over 16 million and e-commerce volume will increase more than 50 percent.

4. Research Methodology

4.1. Aim of the Research

The primary aim of this research is to advance the understanding of online shopping behavior in Turkey. This research examines device usage, the reasons behind to shop or not to shop online, online shopping category and e-commerce site preferences, payment methods, international e-commerce and online marketplace usage. While the principle objective of this research is to find out online shopping behavior in Turkey, demographics are also examined.

4.2. Research Sample

The sample is chosen randomly from the potential online shoppers who use at least one of computer, smartphone or tablet. In order to find out general online shopping behavior, an online survey is conducted. The survey is assured to be accessible via computer, smartphone or tablet. The survey is sent via email to the selected individuals; also social media networks Twitter and Facebook are used to reach a wider audience. In addition to the social media networks and email, the survey is also broadcasted on mobile messaging application Whatsapp to the selected contacts. The sample contains 234 individuals. Answering the survey takes around 2 or 3 minutes.

4.3. Research Findings

Gender

Percentage of women participants is 60.3 with 141 individuals and percentage of men participants is 39.7 with 93 individuals. Gender breakdown is shown on Figure 4.1 below.
Age
Age of the participants differentiate between 22 and 41. The average age of the participants is 29.4. The standard deviation is calculated 4.2082 and in 90 percent confidence level $z=1.645$. The survey is 90 percent confident that the true mean of the population is between 22.53 and 36.37.

Education
153 individuals which is 65.4 percent of the participants are graduated from a university. 30.8 percent with 72 individuals master degree follows the university graduates. While doctorate graduates are just 2.6 percent with 6 individuals, high school graduates are 1.3 percent with 3 individuals. Education breakdown is shown on Figure 4.2.

Occupation
24 participants which is 10.3 percent of total, stated that they are unemployed. 15 participants which is 6.4 percent of total, stated that they working in a part-time job, and the rest, 195 participants which is 83.3 percent of total stated that they work in a full-time job. Occupation breakdown is shown on Figure 4.3 below.

Figure 4.1: Gender of the participants

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Device Ownership
Multiple selection was allowed in device ownership question. Even if they don't own a computer or tablet, all of the participants stated that they own a smartphone. 3 participants which is 1.3 percent of total, stated that they have smartphone only. While 51 participants which is 21.8 percent of total stated that they own a computer and a smartphone together, 180 participants which is 76.9 percent of total stated that they own a computer, a smartphone and a tablet all together. Average number of device owned by each participant is 2.8.

Time Spent on Devices
The range of hours spent on computer is between 0 and 15 while it is between 1 and 18 for smartphone, between 0 and 3 for tablet. In average, 7.2 hours is spent on the computers per day even as 5.8 hours is spent on a smartphone and 1.0 hour is spent on a tablet.

Online Shopping Situation
228 individuals by 97.4 percent of the participants stated that they have shopped online while only 6 individuals by 2.6 percent stated that they have never made online shopping.

The Reasons Not To Shop Online
Multiple selections was allowed in this question. Among the participants who never shopped online, need of inspecting products physically is outstanding from the other reasons by 50 percent. Security concerns follow it by 33 percent and product availability by 17 percent come after. The reasons not to shop online are shown on Figure 4.4 below.
Figure 4.4: The reasons not to shop online

Preferred Devices To Shop Online
Multiple selection was allowed in this question. Online shoppers among the participants prefer computer and smartphone mostly by 32 percent. Computer, smartphone and tablet all together are preferred by 29.4 percent while only computer is preferred by 21.5 percent. Only tablet by 6.6 percent, only smartphone by 5.3 percent, computer and tablet together by 3.9 percent and lastly smartphone and tablet together by 1.3 percent follow in preference for the device to shop online.

The Reasons To Shop Online
Multiple selection was allowed in this question. “Saving time” is outstanding from the other reasons by 72 percent. Delivery directly to home or office follows by 71 percent, easier shopping experience by 62 percent, product/price comparison by 61 percent, better prices by 54 percent, getting product information easily by 39 percent, online exclusive products by 26 percent and free delivery by 20 percent come after. The reasons to shop online are shown on Figure 4.5 below.

Most Preferred Online Shopping Categories
Multiple selections was allowed in this question. Travel and bookings category, which is like purchasing plane tickets or booking hotel rooms, have been stated as preferred online shopping category by online shopper participants in 100 percent. Fashion by 79 percent comes after, financial services and congrats-souvenir categories both by 70 percent follow. Grocery shopping has been stated as preferred online shopping category by 43 percent while technology gets the least preferred category by 39 percent. The most preferred online shopping categories are shown on Figure 4.6 below.

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Most Popular Local E-Commerce Sites

Multiple selections was allowed in this question. Hepsiburada.com has been stated as preferred local e-commerce site by 55 percent among the participants who shop online. While markafoni.com has been preferred by 49 percent, trendyol.com by 44 percent, gittigidiyor.com by 38 percent and sahibinden.com by 37 percent follow. N11.com by 26 percent, mobile application Getir by 22 percent, teknosa.com by 14 percent, kliksa.com by 8 percent and shopigo.com by 8 percent come after. The most popular local e-commerce sites are shown on Figure 4.7 below.

International E-Commerce Usage

161 individuals, which is 70.6 percent of all participants who shopped online, have stated that they shop on international e-commerce sites while 67 individuals which is 29.4 percent of all participants who shopped online have stated that they do not.

Reasons To Shop On International E-Commerce Sites

Multiple selection was allowed in this question. Product unavailability in Turkey has been stated by 85 percent of the participants who shop on international e-commerce sites. Better prices by 47 percent follows, easier user experience
and free delivery option come after by 7 percent for both. Reasons to shop on international e-commerce sites are shown on Figure 4.8 below.

**Most Popular International E-Commerce Sites In Turkey**

Multiple selections was allowed in this question. Amazon.com has become the most stated site among the participants who shop on international e-commerce sites by 81 percent. Ebay.com by 59 percent and Asos.com by 36 percent come after. Alibaba.com and Aliexpress.com have been stated by 25 percent and 24 percent in order. The most popular international e-commerce sites in Turkey are shown on Figure 4.9 below.

**Payment Methods While Shopping Online**

Multiple selections was allowed in this question. Credit card method has been stated by 97 percent of the participants who shop online. Digital payment tools like Paypal etc. have been stated by 33 percent, debit card by 16 percent, cash at the door by 9 percent, money transfer by 5 percent and mobile payment by 3 percent follow. Payment methods while shopping online are shown on Figure 4.10 below.

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Selling A Product On C2C Sites
105 individuals by 46.1 percent of all participants who shopped online have stated that they have sold a product on C2C e-commerce sites while 123 individuals by 53.9 percent have not.

Purchasing A Product On C2C Sites
161 individuals by 70.6 percent of all participants who shopped online have stated that they have purchased a product on C2C e-commerce sites while 67 individuals by 29.4 percent have not.

5. Conclusion
In order to have a better understanding of online shopping behavior in Turkey, conducted survey results have been analyzed. From 234 participants, 141 of them are women by 60.3 percent and 93 of them are men by 39.7 percent. While age range of participants is between 22 and 41, average age is 29.4. Most of the participants are graduated from a university by 65.4 percent, master degree by 30.8 and doctorate degree by 2.6 are observed as education level. Majority of the participants have stated that they work full-time by 83.3 while 10.3 percent have stated that they do not work.

All of the participants have at least a device from computer, smartphone or tablet. Smartphone is owned by all of the participants. While the largest range is in time spent on smartphone, which is between 1 and 18 hours, the average time spent on devices per day are, 7.2 hours on computer, 5.8 on smartphone and 1.0 hour on tablet. Most of the time is spent on computer or smartphone on daily basis. Since the smartphones are owned by all of the participants and time spent on smartphones is high, mobile site and mobile application production or development may be considered by the e-commerce companies.

97.4 percent of the participants have stated that they shop online. The participants who do not shop online, state the main reason not to shop online as their need to inspect product physically by 50 percent, security concerns by 33 percent and product unavailability on internet by 17 percent come after.

One of every 3 participants have stated that they prefer computer and smartphone to shop online. 29.4 percent of the participants has stated that they use computer, smartphone and tablet for online shopping purposes.

The most specific reason to shop online has observed as “saving time” by 72 percent of participants who make online shopping. Instead of going to a physical store and make shopping there, people prefer to shop online and save time for other purposes. “Delivery directly to home or office” is the second most specific reason to shop online by 71 percent so it can be considered as people do not will to carry packages or bags along them but receive them at home or office. In the light of these two major results, time saving and delivery concepts can be the focus in e-commerce marketing campaigns. While 62 percent thinks e-commerce provides an “easier shopping experience”, 61 percent states “product/price comparison allowance” is one of the reasons to shop online. As 39 percent states

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“getting product information easily” is one of the reasons to shop online, it can be considered as accessible information and comparisons are drivers of e-commerce. Of course “better prices” are stated by more than half of the participants. Online exclusive products and free delivery options followed these reasons by below 30 percent.

“Travel and bookings” category has been observed as the most shopped category among all online category options by 100 percent. Secondly, “fashion” category comes by 79 percent. So it can be said that travel and fashion industries enjoy the e-commerce mostly. The third place is shared between “financial services” and “congrats-souvenir” categories by 70 percent. “Grocery” category has been observed by 43 percent, so it can be argued there is an opportunity for potential growth. “Technology” category has been observed as the last preferred category by 39 percent, so it can be argued that people tend to inspect or try expensive products physically before they make the purchase decision.

Hepsiburada.com has been stated as the most popular local e-commerce site by 55 percent. Secondly Markafoni.com by 49 percent and at the third place trendyo1.com by 44 percent follow. Top 3 local e-commerce sites can be considered as under dominance of mass and fashion markets. C2C platforms Gittigidiyor.com and Sahibinden.com have been observed in similar percentages, by 38 and 37 percent in order. N11.com by 26 percent followed by Getir by 22 percent, Teknosa.com by 14 percent, kliksa.com and shopigo.com both by 8 percent. It can be discussed that less popular e-commerce sites may invest in marketing to increase awareness.

International e-commerce sites are used by 70.6 percent of the participants who shop online. The main reason behind it has been observed as “products I look for not available in Turkey” by 85 percent. It can be argued that if unavailable products are distributed in Turkey, distributors can find themselves a market. “Better prices” by 47 percent follows, so it can be considered as prices for some products are higher than international markets or there is a misperception among the consumers. “User experience is easier” and “free delivery” both by 7 percent come after.

The e-commerce giant Amazon.com takes the leadership as the most popular international e-commerce site by 81 percent. Ebay.com has the second place by 59 percent and Asos.com has the third place by 36 percent. Alibaba.com and Aliexpress.com have very similar percentages by 25 and 24 percent in order. It can be argued that people find the products that are not available in Turkey on Amazon.com easily since it has a wide portfolio of various products.

The most preferred payment method has been observed as “credit card” by 97 percent. “Digital payment tools like Paypal etc.” has the second place by 33 percent. “Debit card” method has been stated by 16 percent, so some of the consumers prefer to make the payment directly from their accounts. “Cash at the door” by 9 percent, “money transfer” by 5 percent and “mobile payment” by 3 percent come after. If any of e-commerce sites which don’t accept credit cards but other payment methods, it can be claimed that their revenues would decrease dramatically.

46.1 percent of the participants have stated that they have sold a product on C2C platforms, while 70.6 percent have stated that they have purchased a product from C2C platforms. It can be considered that users tend to make a purchase more than selling a product.

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